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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,991	11/17/2003	Timothy Andrew Healy	839-1431	9394
30024	7590	10/25/2005	EXAMINER	
NIXON & VANDERHYE P.C. 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			CASAREGOLA, LOUIS J	
			ART UNIT	PAPER NUMBER
			3746	
DATE MAILED: 10/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/712,991	HEALY, TIMOTHY ANDREW	
	Examiner	Art Unit	
	Louis J. Casaregola	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 9/23/05.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-24 is/are pending in the application.
 4a) Of the above claim(s) 18-24 is/are withdrawn from consideration.
 5) Claim(s) 10-17 is/are allowed.
 6) Claim(s) 1-9 is/are rejected.
 7) Claim(s) 1-9 is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

Election

Applicant's election of the invention of Group I, method claims 1-17, is acknowledged. An action on the merits of these claims is set forth below, and non-elected claims 18-24 are withdrawn from further consideration.

Objections To Claims

Claims 1-9 are objected to under 37 CFR 1.75(a) for the following reasons:

Claim 1 and related dependent claims 2-9 refer to "an algorithm have an input" (claim 1, line 4). The cited expression includes a grammatical error -- the term "have" is misused and should be replaced with "having".

The claims also refer to "the estimated operating condition" (claim 1, lines 12-13). This expression is inconsistent with its antecedent, "estimated operating parameter" (lines 3-4). The cited expression should therefore be amended to replace the term "condition" with "parameter".

Claim Rejections - 35 USC 112

Claims 1-9 are rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The invention in this case is a method involving the use of sensor inputs to estimate an operating parameter. The claims however are rendered indefinite because the recited sensors are ambiguous and their correspondence to the preferred embodiment of the invention is unclear.

The claims recite the step of "determining a first estimated operating parameter using an algorithm have [having] an input from a sensor" (claim 1, lines 3-4). This sensor appears to correspond to one of sensors 24 which provide inputs to algorithm 74; see Figure 4. The claims additionally recite the step of "determining a first trim factor based on a comparison of the first estimated operating parameter and the output of the sensor when a condition of the second sensor is in a first mode" (claim 1, lines 6-9). "[T]he sensor" in this passage appears to refer to the sensor 24 previously introduced in lines 3-4. If that is the case, however, the claims contradict the preferred embodiment since calculation of trim factor K is based on input from sensors 78, which are shown as a separate and distinct group from sensors 24. The cited passage also makes reference to "the second sensor", which has no clear antecedent and is never properly defined by the claim.

Claims 2 and 5-9 include further recitations of "the sensor" and/or "the second sensor". These expressions are all likewise indefinite since, in each instance, the "sensor" refers back to ambiguous language in parent claim 1.

Allowable Subject Matter

Claims 10-17 are allowed.

References

Spang et al, Buchhop et al, Wiseman, and Gribble et al are cited as disclosing examples of prior art systems that estimate engine operating parameters.

L. J. Casaregola
571-272-4826 (M-F; 7:30-4:00)
571-273-8300 FAX
October 20, 2005

L.J. Casaregola
LOUIS J. CASAREGOLA
PRIMARY EXAMINER

If repeated attempts to reach the examiner by telephone are unsuccessful, the art unit supervisor, Timothy Thorpe, can be reached at 571-272-4444.

Information regarding the status of this application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR, and status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).